

II. Remarks

Reconsideration and re-examination of this application in view of the above amendments and the following remarks is herein respectfully requested.

Applicant would like to thank the Examiner for the interview conducted on October 27, 2008. In light of the discussion, new independent claim 42 and dependent claim 43 are presented. Further, the Examiner and the undersigned discussed the teachings of Masami. In particular that Masami teaches keeping a constant luminance as the temperature increases until the temperature reaches an upper threshold. In contrast, the current independent claims recited that the controller is configured to decrease the display luminance as the temperature of the display increases through a first temperature range until the temperature reaches an upper temperature threshold. The examiner noted that other references were available to show this feature. However, applicants maintained that Masami does not show this feature. Additionally, the elements of new claims 42 and 43 were discussed by the undersigned and the Examiner. These elements were noted by all as clearly defining over the Masami reference.

After entering this Amendment, claims 1, 3-15, 17-28, and 30-43 remain pending. Claims 2, 16, and 29 have been cancelled.

New Claims 42 and 43

In addition to the elements of claim 1, independent claim 42 includes that the display luminance transitions from an upper luminance value at the lower temperature threshold to a lower luminance value at the upper temperature threshold based on function of the temperature measured by the temperature sensor. Further,

claim 43 defines that the display luminance is maintained at the lower luminance value after the temperature exceeds the upper temperature threshold. Clearly Masami does not teach these elements and, therefore, does not teach the present invention according to claims 42 and 43.

Claim Rejections - 35 U.S.C. §102

Claims 1, 3-15, 17-28, and 30-41 were rejected under 35 U.S.C. § 102(b) as being anticipated by Japanese Patent No. 2001-312249 to Masami (Masami).

Independent claims 1, 15, and 28 recite that the controller is configured to decrease the display luminance as the temperature of the display increases through a first temperature range until the temperature reaches an upper temperature threshold. Masami teaches keeping a constant luminance as the temperature increases until the temperature reaches an upper threshold. Therefore, cannot teach each and every element of claims 1, 15, and 28 as required for a rejection under 35 U.S.C. § 102(b).

More specifically, Masami does not decrease the display luminance as the temperature of the display increases through a first temperature range until the temperature reaches the upper temperature threshold. Masami teaches two modes (1) Full power (2) Reduce power at a fixed rate with respect to time. Neither mode teaches decreasing luminance as a function of an increasing temperature through a temperature range. Clearly the first mode, where the full power is supplied to the display, does not teach decreasing luminance with respect to temperature. The second mode reduces power after the temperature threshold is reached. Further, Masami reduces the power at a fixed rate based on time, and not according to a temperature measurement.

More specifically as taught in paragraph [0008] of Masami, the controller drives the LEDs at full power until a first reference temperature is reached. Then, the controller reduces the driving signal at a fixed rate to reduce the luminance. Applicant submits that Masami reduces the driver signal at a fixed rate with respect to time, rather than maintaining a relationship between the brightness and the temperature as per the present claims. This is further supported in that Masami teaches "if the brightness of an LED component is reduced, since the heating value generated from the LED component itself will become less, it changes in the direction in which ambient temperature falls. Although the ambient temperature of the LED component 12 falls gradually, lighting controlled by the brightness reduced at the above-mentioned step S104 is continued until it becomes below the second reference temperature." As such, Masami teaches reducing the driving signal at a fixed rate over time until the temperature of the component reaches a second lower temperature reference. At this point, Masami teaches driving the LEDs back at the original brightness. Accordingly, Masami does not teach decreasing the display luminance as the temperature of the display increases as recited in independent claims 1, 15, and 28. Masami merely teaches driving the LEDs at full luminance until the first temperature threshold is reached, then decreasing the driving signal over time at a constant rate until the second lower temperature threshold is reached. As such, Masami does not teach the present invention according to independent claims 1, 15, and 28.

Further, claims 3-14, 17-27, and 30-41 depend from independent claims 1, 15, or 28 and are, therefore, patentable for at least the same reasons as given above in support of claims 1, 15, and 28.

Further, with respect to claim 3, 17, and 30, Masami does not teach that the display luminance is increased as the temperature of the display decreases over the first temperature range.

With respect to claims 4-5, 11-12, 18-19, 26-27, 31-32, and 38-39, Masami does not teach maintaining a linear relationship between the luminance and temperature. Even more specifically, the direct relationship between luminance and temperature provided in claim 5, is not taught by the reference.

With respect to claims 6-10, 20-24, and 33-37, Masami does not teach the temperature ranges as claimed therein. The examiner notes additional references citing the ranges would be obvious. However, the claim is rejected under 102(b) anticipation, as such the rejection is improper and will not be addressed at this time.

With respect to claims 13-14, 27, and 40-41, Masami does not teach the luminance being varied in an inversely proportional relationship to a luminance degradation function of the LEDs. The cited reference does not at all teach incorporating an LED degradation function into its control of luminance.

Accordingly Applicant requests withdraw of the rejections under 35 U.S.C. § 102(b).

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that the present form of the claims are patentably distinguishable over the art of record and that this application is now in condition for allowance. Such action is requested.

Respectfully submitted by,

Dated: October 31, 2008

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